







BioBrent BB16 OVP

300-500 kW Continous Power

The engines for power generation from the cooperation between BioBrent and Scania are based on a robust design with a strength optimised cylinder block containing wet cylinder liners that can easily be exchanged. Individual cylinder heads with 4 valves per cylinder promotes repairability and fuel economy.

The engine is equipped with a dedicated BioBrent Engine Management System, EMS, in order to ensure the control of all aspects related to engine performance.

The injection system is XPI (Extra High Pressure Injection), a common rail system that gives low exhaust emissions with good fuel economy and a high torque.

The mechanical optimization and electronic setup of OVP Engines are the result of the deep knowledge of BioBrent and Scania in vegetable oil power plants and engines manufacturing.







Standard equipment

- Biobrent Engine Management System, EMS
- Extra high pressure fuel injection system, XPI
- Turbocharger
- Fuel filter
- Fuel pre-filter with water separator, for separate mounting
- Fuel heater
- Oil filter, full flow
- Centrifugal oil cleaner
- Oil cooler, integrated in block
- Oil filler, in valve cover
- Deep front oil sump
- Oil dipstick, in block
- Magnetic drain plug for oil draining
- Starter, 1-pole 7.0 kW (EMS controlled)
- Flywheel, SAE 14
- Silumin flywheel housing, SAE 1 flange
- · Cast iron flywheel housing, SAE 1 flange
- Front-mounted engine brackets
- Open crankcase ventilation
- Operator's manual



SUPER LUBRITECH OVP

Lubricating oil for stationary powergeneration engines burning vegetable oil

Super Lubritech OVP* is designed by BioBrent for engines Super High Performance Diesel (SHPD) turbo and meets the requirements of ACEA E7 and API CI-4 / CH-4. The high detergent action and the effective resistance to oxidation allows to obtain higher performances in naturally aspirated engines and / or supercharged with turbocharger, therefore high speeds and high temperatures.

Features

- High wear protection
- Effective prevention against deposits
- High cleaning action and oxidation resistance
- Improved cylinders and pistons cleaning
- Good performance at high temperatures

Technical data (500 kW Continous Power)

	1500 rpr	1500 rpm (50 Hz)		1800 rpm (60 Hz)	
	PRP	СОР	PRP	ESP	Unit
Gross power	621	499	576	632	kW
	700	580	650	715	kVA
Gross torque	3953	3312	3056	3353	Nm
Spec. fuel consumption (diesel)					
full load	190	186	199	201	g/kWh
3/4 load	186	185	196	197	g/kWh
3/4 load	190	189	199	197	g/kWh
Heat rejection					
to coolant	192	170	206	238	kW
to exhaust gas	414	330	418	461	kW
to charge air	121	108	106	115	kW
to surrounding air	56	48	54	60	kW
Air consumption	43	41	44	45	kg/min
Air temperature					
before charge air cooler	214	200	190	198	°C
after charge air cooler	48	46	49	50	°C
Pressure in intake manifold	28	22	21	22	Bar
Fall of pressure, charge air cooler	0.1	0.1	0.2	0.2	Bar
Exhaust flow	45	43	46	47	kg/min
Exhaust temperature	520	455	518	547	°C
Step load performance	61	60	90	84	%
	381	380	520	533	kW

Lubrication Oil

Recommended oil: Super Lubritech OVP







^{*} Technical datasheet available on request